

DRAFT - December 22, 1994

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	
)	
v.)	CASE NO.
)	CIV-93-1109-MORENO
METROPOLITAN DADE COUNTY,)	MAGISTRATE JUDGE
MIAMI-DADE WATER AND)	
SEWER AUTHORITY DEPARTMENT,)	
and the STATE OF FLORIDA)	SECOND AND FINAL
)	<u>PARTIAL CONSENT DECREE</u>
Defendants.)	

WHEREAS, Plaintiff, the United States of America, by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), has filed a complaint in this action seeking injunctive relief pursuant to Section 504 of the Clean Water Act (the "Clean Water Act"), 33 U.S.C. § 1364, alleging that defendants, Metropolitan Dade County and the Miami-Dade Water and Sewer Authority Department (hereinafter collectively referred to as the "Defendants"), are posing an imminent and substantial endangerment to the health or welfare of persons by i) the continued use of the 72-inch force main that conveys untreated wastewater from the City of Miami under Biscayne Bay to the Central District Wastewater Treatment Plant ("Central Plant") and ii) the unpermitted discharge of untreated wastewater from

Defendants' wastewater treatment and collection system; and

WHEREAS, the First Partial Consent Decree entered by this Court on January 13, 1994, resolves the First Claim for Relief by the United States in the complaint concerning the alleged threat presented by the continued use of the 72-inch force main that conveys untreated wastewater from the City of Miami under Biscayne Bay to the Central Plant; and

WHEREAS, by Order of Dismissal as to Plaintiff's Second Claim for Relief dated December 2, 1994, the Court dismissed the United States' Second Claim for Relief; and

WHEREAS, the United States' Third Claim for Relief, Fourth Claim for Relief, and Fifth Claim for Relief in the complaint in this action seek injunctive relief and the assessment of civil penalties pursuant to Sections 301, 309(b) and (d), and 402 of the Clean Water Act, 33 U.S.C. §§ 1311, 1319(b) and (d), and 1342, alleging that the discharge of untreated wastewater from Defendants' wastewater treatment and collection system without a permit constitutes a violation of the Clean Water Act, the regulations promulgated thereunder, and the various terms and conditions of the wastewater discharge permits issued by EPA to the Miami-Dade Water and Sewer Authority Department and Metropolitan Dade County; and

WHEREAS, Defendant Metropolitan Dade County, a political subdivision of the State of Florida, owns the "publicly owned treatment works" that serves a substantial portion of Dade County, Florida, which is located in the Southern District of Florida; and

WHEREAS, the State of Florida has appeared in this lawsuit as a defendant pursuant to Section 309(e) of the Clean Water Act, 33 U.S.C. § 1319(e); and

WHEREAS, Defendants are charged with the responsibility of operating the municipal collection and treatment system for Metropolitan Dade County; and

WHEREAS, it is alleged that Defendants have caused or contributed to the unpermitted discharge of untreated wastewater containing raw sewage into local portions of the Atlantic Ocean, Biscayne Bay, the Miami River, the Little River, the Oleta River, Wagner Creek and Gratigny Canal, which are "navigable waters" as that term is defined by Section 502(7) of the Clean Water Act, 33 U.S.C. § 1362(7); and

WHEREAS, Metropolitan Dade County and the State of Florida have entered into an administrative Settlement Agreement, OGC No. 92-2248, dated March 1, 1993, and an administrative Settlement Agreement, OGC No. 93-0760, dated July 27, 1993, concerning the operation and maintenance of Defendants' collection and transmission system and capacity of its treatment plants.

WHEREAS, Defendants, without making any admission of law or fact or evidence of same, or of any violation of any law or regulation, and the United States agree that: (a) settlement of the Third Claim for Relief, Fourth Claim for Relief, and Fifth Claim for Relief in the complaint in accordance with this Consent Decree is in the best interests of the parties and the public;

and (b) entry of this Consent Decree without litigation is the most appropriate means of resolving the Third Claim for Relief, Fourth Claim for Relief, and Fifth Claim for Relief in the complaint; and

WHEREAS, the State of Florida, without making any admission of law or fact or evidence of same, or of any violation of any law or regulation, and Plaintiff agree that:

(a) settlement of the Sixth Claim for Relief in the complaint in accordance with this Consent Decree is in the best interests of the parties and the public; and (b) entry of this Consent Decree without litigation is the most appropriate means of resolving the Sixth Claim for Relief in the complaint.

NOW THEREFORE, with respect to the Third Claim for Relief, Fourth Claim for Relief, Fifth Claim for Relief, and Sixth Claim for Relief in the complaint, and before the taking of any testimony, without admission by Defendants or the State of Florida of the non-jurisdictional allegations in the complaint, without adjudication of any issue of fact or law, and upon the consent and agreement of the parties to this Consent Decree, it is hereby ORDERED, ADJUDGED and DECREED as follows:

I.

JURISDICTION

1. This Court has jurisdiction over the subject matter herein and the parties to this action pursuant to Sections 309 and 504 of the Act, 33 U.S.C. § 1319, and 28 U.S.C. §§ 1331, 1345, 1355. The Third Claim for Relief, Fourth Claim for Relief,

and Fifth Claim for Relief in the complaint state claims upon which relief may be granted against Defendants under Section 309 and 402 of the Act, 33 U.S.C. §§ 1319 and 1342, for injunctive relief and civil penalties. The Sixth Claim for Relief in the complaint states a claim upon which relief may be granted against the State of Florida under Section 309(e) of the Act, 33 U.S.C. § 1319(e). Authority to bring this suit is vested in the United States Department of Justice by 28 U.S.C. §§ 516 and 519, and 33 U.S.C. § 1366.

II.

VENUE

2. Venue is proper in the United States District Court for the Southern District of Florida pursuant to Sections 309(b) and 504 of the Act, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because it is the judicial district in which Defendants are located, and in which the alleged violations occurred.

III.

PARTIES

3. Plaintiff, United States of America, is acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency.

4. Defendant Metropolitan Dade County (the "County") is a political subdivision of the State of Florida, duly chartered and formed under the laws of the State of Florida, and is a "person" within the meaning of Section 502(5) of the Clean

Water Act, 33 U.S.C. § 1362(5), and a "municipality" within the meaning of Section 502(4) of the Clean Water Act, 33 U.S.C. § 1362(4).

5. Defendant Miami-Dade Water and Sewer Authority Department ("MDWASAD") is a department of Metropolitan Dade County, and is a "person" within the meaning of Section 502(5) of the Clean Water Act, 33 U.S.C. § 1362(5).

6. The State of Florida is a defendant pursuant to Section 309(e) of the Clean Water Act, 33 U.S.C. § 1319(e).

IV.

BINDING EFFECT

7. A. The provisions of this Consent Decree shall apply to, and be binding upon, Defendants to this action, their officers, directors, employees, agents, servants, successors and assigns, and upon all persons, firms and corporations in active concert or participation with Defendants or Defendants' officers, directors, agents, employees, successors and assigns, and upon the United States.

B. Effective seven (7) days from the Date of Lodging of this Consent Decree until its termination, Defendants shall give written notice of this Consent Decree to any successors in interest prior to transfer of ownership or operation of any portion of their wastewater treatment and collection system and shall provide a copy of this Consent Decree to any successor in interest. Defendants shall notify EPA Region IV in writing as specified in Paragraph 62 of any successor in interest at least

twenty-one (21) days prior to any such transfer.

C. Defendants shall provide a copy of this Consent Decree to each engineer, consultant and contractor to be retained to perform the work or any portion thereof herein described upon execution of any contract relating to such work, and shall provide a copy to each engineer, consultant and contractor already retained no later than thirty (30) days after the Date of Lodging of this Consent Decree.

V.

OBJECTIVES

8. It is the express purpose of the parties entering into this Consent Decree to further the objectives set forth in Section 101 of the Clean Water Act, 33 U.S.C. § 1251, and to resolve the issues alleged by the United States in the Second Claim for Relief, Third Claim for Relief, Fourth Claim for Relief, Fifth Claim for Relief and Sixth Claim for Relief in the complaint. In light of these objectives, Defendants agree to, inter alia, cause the immediate implementation of the remedial measures as herein set forth, take all steps necessary to minimize further unpermitted discharges of untreated wastewater containing raw sewage to local surface waters, and agree to all other conditions of this Consent Decree.

VI.

DEFINITIONS

9. Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the

Clean Water Act, 33 U.S.C. §§ 1251 et seq., and the regulations promulgated thereunder.

10. The following terms used in this Consent Decree shall be defined as follows:

A. "Calendar quarter" shall mean the three month period ending on March 31st, June 30th, September 30th, and December 31st.

B. Unless otherwise indicated, the term "day" or "days" as used herein shall mean a calendar day or calendar days. When the day a report or other deliverable is due under this Consent Decree falls on a Saturday, Sunday or a legal holiday as set forth in Federal Rule of Civil Procedure 6, the County shall have until the next calendar day that is not one of the aforementioned days for submittal of such report or other deliverable.

C. "Commission" shall mean the Board of County Commissioners of Metropolitan Dade County, Florida.

D. "Consent Decree" shall mean the Second and Final Partial Consent Decree.

E. "County Manager" shall mean the County Manager of Metropolitan Dade County, Florida.

F. "Date of Entry" shall mean the date the Consent Decree is approved and signed by a United States District Court Judge.

G. "Date of Lodging" shall mean the date the Consent Decree is filed for lodging with the Clerk of the Court for the

United States District Court for the Southern District of Florida.

H. "Defendants' Collection System" shall mean the collection and transmission system (including all force mains, gravity sewer lines, and pump stations), manholes and appurtenances thereto that are owned or operated by Metropolitan Dade County, Florida, and the Miami-Dade Water and Sewer Department formerly known as the Miami-Dade Water and Sewer Authority Department. Defendants' Collection System, as defined herein, shall not include those portions of Defendants' storm water collection system exclusively dedicated to the collection and transmission of stormwater, or real properties (including the buildings, gravity sewer lines, laterals and pump stations located thereon) owned or occupied by Defendant Metropolitan Dade County in a proprietary capacity (e.g., Stephen P. Clark Center, Dade County Department of Housing and Urban Development, Dade County Aviation Department (See Appendix A, etc.)). In addition, Homestead Air Force Base shall not be considered a part of Defendants' Collection System.

I. "Normal in-line storage capacity" shall mean the available storage capacity within Defendants' gravity sewer lines, manholes and appurtenances which discharge to a pump station, to the extent that such storage does not: i) impede the flow of wastewater from a sewer service connection to Defendants' Collection System which would result in a backup of wastewater into a customer's premises; ii) cause an overflow or unpermitted

discharge of untreated wastewater containing raw sewage from Defendants' Collection System; or iii) require any pump station in Defendants' Collection System to operate with a wet well level higher than four (4) feet below the crown of the lowest surface street (containing a gravity sewer line) adjacent to the pump station, unless otherwise approved by EPA. In-line storage capacity created by deliberate restriction of gravity sewer flow through the use of mechanical means (e.g., use of valves, gates, dams) shall not be included in determining a pump station's ability to manage peak flows. Notwithstanding the foregoing sentence, Defendants retain the ability to transfer flow to or from Defendants' gravity sewer lines, manholes, appurtenances and pump stations to off-line storage facilities.

J. "Volume Sewer Customers" shall mean the entities and municipalities serviced on a bulk basis (at a wholesale rate) by the Miami-Dade Water and Sewer Department within the territorial limits of Dade County, and currently includes the municipalities of Bal Harbour, Bay Harbor Islands, Coral Gables, Florida City, Homestead, Hialeah, Hialeah Gardens, Medley, Miami Beach, Miami Springs, North Miami, Opa Locka, North Bay Village, North Miami Beach, Surfside and West Miami, but does not include Homestead Air Force Base.

VII.

REMEDIAL ACTIONS

11. Infiltration/Inflow Evaluation and Rehabilitation Program.

A. Defendants shall undertake an infiltration/inflow

evaluation and rehabilitation program to identify and reduce infiltration/inflow to Defendants' Collection System. For purposes of this Paragraph only: i) the term "evaluation" shall be interpreted in accordance with the meaning ascribed to that term in sub-chapters 3.3, 3.4, 3.5, 3.6 and Chapter 4 of the Handbook: Sewer System Infrastructure Analysis and Rehabilitation, EPA/625/6-91/030, Oct. 1991, and in accordance with the technical procedures for identification of infiltration/inflow set forth in sub-chapters 3.3, 3.4, 3.5, 3.6, and Chapter 4; ii) the term "rehabilitation" shall be interpreted in accordance with the meaning ascribed to that term in Chapter 6 of the Handbook: Sewer System Infrastructure Analysis and Rehabilitation, EPA/625/6-91/030, Oct. 1991, and in accordance with the technical procedures for sewer system rehabilitation set forth in Chapter 6; and iii) the term Defendants' Collection System shall have the meaning ascribed to it by Paragraph 10(H) of this Consent Decree, and shall include all portions of Defendants' Collection System as of the Date of Lodging of this Consent Decree.

B. Within ninety (90) days of the Date of Lodging of this Consent Decree, Defendants shall provide to EPA a list and a map that identifies each "service area" within Defendants' Collection System. For purposes of this Paragraph, "service area" shall be defined as an area within Defendants' Collection System that includes the gravity sewer lines and appurtenances, exclusive of service connection laterals, that contribute flow to

a primary pump station. "Primary pump station" shall refer to:

- i) the pump stations in Defendants' Collection System identified in Appendix B that receive flow from gravity sewer lines; and
- ii) the regional pump stations in Defendants' Collection System identified in Appendix C that receive flow directly from gravity sewer lines and that also require alternate methods of flow evaluation, monitoring and measurement.

The list submitted by Defendants shall specify the flow rate in gallons per day, per inch-diameter, per mile of pipe ("gpd/in/mi") for each service area according to the most recent available representative midnight flow data collected for that particular service area. Unless otherwise agreed by EPA, "midnight flow" shall mean the minimum flow rate experienced in a service area (which is generally between 12:00 a.m. and 5:00 a.m.), exclusive of known commercial and industrial sources of wastewater. The service area list shall, for each service area, identify the following information: i) most recent wet season measured midnight flow rate (gpd/in/mi); ii) most recent dry season measured midnight flow rate (gpd/in/mi); iii) contemporaneous rainfall (from the nearest rainfall monitoring station) and groundwater data (from the nearest groundwater monitoring well) -- as soon as available -- for each midnight flow measurement; and iv) total length (in feet) of gravity sewer lines according to pipe diameter in each service area.

C. Defendants shall complete the evaluation of 6,960,000 feet of gravity sewer lines and associated manholes by

July 27, 1995. Evaluations completed by Defendants since July 27, 1992, shall be included in determining whether Defendants have evaluated 6,960,000 feet of gravity sewer lines and associated manholes by July 27, 1995. Defendants shall evaluate a minimum of 9,280,000 feet of gravity sewer lines and associated manholes from July 27, 1992 through July 27, 1996, and shall complete the evaluation of each of the service areas in Defendants' Collection System no later than July 27, 1997. Upon certification by Defendants to EPA that Defendants have completed the evaluation of each of the service areas in Defendants' Collection System, Defendants shall complete, on an annual basis, the evaluation of at least 1,288,888 feet of gravity sewer lines and associated manholes selected by Defendants until July 27, 1999.

D. Defendants shall complete the rehabilitation of gravity sewer lines and associated manholes identified during the evaluations undertaken in accordance with Paragraph 11(C), according to the following schedule: i) complete 80% (in linear feet) of the grouting no later than twelve (12) months from the last day of the calendar quarter in which the evaluation of the evaluated gravity sewer lines and associated manholes was completed; ii) complete 80% of the sewer main point repairs (in linear feet) and 80% of the manholes requiring point repairs no later than eighteen (18) months from the last day of the calendar quarter in which the evaluation of the evaluated gravity sewer lines and associated manholes was completed; and iii) complete

80% (in linear feet) of the slip lining, line replacement and all other rehabilitation efforts no later than thirty (30) months from the last day of the calendar quarter in which the evaluation of the evaluated gravity sewer lines and associated manholes was completed. Notwithstanding the schedules for rehabilitation work identified above, Defendants shall complete all grouting, point repairs, slip lining and line replacements that are identified before July 27, 1997, by no later than December 31, 2000, and all grouting, point repairs, slip lining and line replacements identified from July 28, 1997, through July 27, 1999, by no later than December 31, 2002.

E. Where an evaluation indicates that a privately-owned portion of a customer service connection lateral that is neither in the public right-of-way nor in a public sanitary sewer easement is a source of infiltration/inflow to Defendants' Collection System, Defendants, within sixty (60) days of the date of the identification of such a lateral, shall notify the owner(s) of the customer service connection lateral(s) that the lateral(s) is a source of infiltration/inflow, and shall require the owner(s) to take all appropriate steps to repair, rehabilitate or replace that customer service connection lateral. The County Manager shall propose to the Commission an ordinance which requires the owner of a privately-owned portion of a customer service connection lateral (that is neither in the public right-of-way nor in a public sanitary sewer easement) that is a source of infiltration/inflow to Defendants' Collection

System to take all appropriate steps to repair, rehabilitate or replace that customer service connection lateral. Within ninety (90) days of the Date of Entry of this Consent Decree, Defendants shall submit to EPA for review a draft of the above-described ordinance and a plan for implementation and enforcement of the draft ordinance upon its enactment. Within thirty (30) days of receipt of EPA's comments on the draft ordinance and plan for implementation and enforcement, the County Manager shall modify the draft ordinance and plan of implementation and enforcement, accordingly, and submit the modified draft ordinance and plan of implementation and enforcement to EPA for final approval. Upon receipt of EPA's final approval of the draft ordinance and plan of implementation and enforcement, the County Manager shall propose the draft ordinance to the Commission for enactment at the next regularly scheduled meeting of the Commission, provided that the next regularly scheduled meeting is no less than twenty-one (21) calendar days from the date of receipt of EPA's final approval, in which case, the County Manager shall propose the draft ordinance to the Commission for enactment at the subsequent meeting of the Commission. Subject to enactment by the Commission of the ordinance, and consistent with the ordinance's "effective date", Defendants shall implement the plan of implementation and enforcement, which shall be incorporated into and become enforceable under this Consent Decree. Defendants shall enforce the ordinance identified in this subparagraph until such time as the identified repairs, rehabilitation or

replacement are completed. Defendants shall initiate enforcement action to cause the repair, rehabilitation or replacement of a customer service connection lateral where the owner of a privately-owned portion of a customer service connection lateral has failed, after reasonable notice (as set forth in the ordinance to be proposed under this Paragraph), to take all appropriate steps to repair, rehabilitate or replace that customer service connection lateral. For purposes of this Paragraph of this Consent Decree, the term "enforcement action" shall mean the issuance of either a "Notice to Correct the Violation" or a "Citation to Cease the Violation" pursuant to Sections 24-5(15)(a) & (b) of the Code of Metropolitan Dade County, Florida, or a Civil Violation Notice pursuant to Chapter 8CC of the Code of Metropolitan Dade County, Florida, or any combination of the foregoing. All of the foregoing remedies shall be cumulative and independent and shall not be deemed to exclude the independent and cumulative utilization of other judicial and administrative remedies provided by law or ordinance.

F. Beginning thirty (30) days after the end of the first calendar quarter following the Date of Entry of this Consent Decree, and thirty (30) days after the end of each calendar quarter thereafter, Defendants shall certify and report to EPA the progress of Defendants' infiltration/inflow evaluation and rehabilitation program. The progress report shall provide information on a service area-by-service area basis as follows:

i) metered flow monitoring measurements (gpd/in/mi) taken both before and after the rehabilitation of the gravity sewer lines; ii) rainfall data as specified in Paragraph 11(B) for the flow measurement period; iii) groundwater level data as specified in Paragraph 11(B)(iii) for the flow measurement period; iv) summary description of all structural deficiencies identified; v) description of area rehabilitated and method of rehabilitation; vi) summary of the length (in feet) of gravity sewer lines evaluated and rehabilitated for each completed service area during the previous calendar quarter; vii) the total number of manholes and other structures rehabilitated; and viii) the date of completion of the evaluation and rehabilitation of each service area.

G. Within thirty (30) days of the Date of Entry of the Consent Decree, Defendants shall submit to EPA for review, comment and approval a report that describes in detail Defendants' infiltration/inflow reduction program. This report shall, at a minimum, include: i) methodology to be used to prioritize the evaluation of service areas; ii) procedures to be used to evaluate infiltration in each service area; iii) procedures to be used to identify sources of inflow in each service area; iv) techniques for reduction of infiltration; v) program for elimination of sources of inflow (including legal mechanisms and enforcement programs); and vi) methodologies to evaluate the success of items i) - v), above. In addition, the report submitted by Defendants to EPA pursuant to this Paragraph

shall specify the methods of flow evaluation, monitoring and measurement developed by Defendants for the regional pump stations listed in Appendix C to this Consent Decree.

H. Defendants' report, as identified in Paragraph 11(G), shall include any of the specific decision-making criteria, procedures and protocols pursuant to which the parties can assess the effectiveness of items i) - v), of Paragraph 11(G), including: i) specific monitoring procedures and protocols for evaluation of each service area (e.g., sampling protocol, monitoring location, etc.); ii) decision-making criteria, procedures and protocols for prioritization of the evaluation and rehabilitation of gravity sewer lines and associated manholes; iii) decision-making criteria, procedures and protocols to determine the need for, and the conduct of, televised inspections of gravity sewer lines and associated manholes; iv) decision-making criteria, procedures and protocols to determine the need for, and the conduct of, grouting in gravity sewer lines and associated manholes (e.g., leakage rate for application of grout); v) decision-making criteria, procedures and protocols used to determine the need for, and the conduct of, smoke testing; vi) decision-making criteria, procedures and protocols used to determine the need for, and the conduct of, dye testing; vii) decision-making criteria, procedures and protocol used to determine the need for, and the conduct of, point repair(s), slip lining or line replacement; and viii) decision-making criteria, procedures and protocols to

determine whether infiltration from a privately-owned lateral is excessive. Beginning with the first quarterly progress report required by Paragraph 11, and on an annual basis thereafter until termination of this Consent Decree, Defendants shall submit the annual budget for each fiscal year (including resources, staffing and capital expenditures) for the infiltration/inflow program required by this Paragraph. EPA will use its best efforts to review the report required by this Paragraph within sixty (60) days of its receipt by EPA.

I. Paragraph 11 of this Consent Decree shall terminate consistent with the procedure set forth in Paragraph 67(B), upon Defendants' certification, and EPA's acceptance of that certification, that the work required by Paragraph 11(C) & (D) has been completed according to the specifications and requirements of Paragraph 11.

12. Illegal Stormwater Sewer Connections.

A. Defendants shall continue to identify and eliminate each illegal stormwater sewer connection to Defendants' Collection System. Defendants shall initiate an enforcement action, within one hundred and twenty (120) days after the Date of Entry of this Consent Decree, to cause the removal of each illegal stormwater sewer connection from Defendants' Collection System known to Defendants on the Date of Entry of this Consent Decree. For purposes of this Paragraph of this Consent Decree, the term "enforcement action" shall mean the issuance of either a Notice to Correct the Violation or a Citation to Cease the

Violation pursuant to Sections 24-5(15)(a) & (b) of the Code of Metropolitan Dade County, Florida, or a Civil Violation Notice pursuant to Chapter 8CC of the Code of Metropolitan Dade County, Florida, or any combination of the foregoing. All of the foregoing remedies shall be cumulative and independent and shall not be deemed to exclude the independent and cumulative utilization of other judicial and administrative remedies provided by law or ordinance.

B. Within thirty (30) days of the Date of Entry of this Consent Decree, Defendants shall update the list, attached hereto as Appendix D, of each known illegal stormwater sewer connection to Defendants' Collection System. Thereafter, and in accordance with the reporting obligations set forth in Paragraph 25 of this Consent Decree, Defendants shall submit a report to EPA for each calendar quarter that includes: i) an updated list of known illegal stormwater sewer connections; ii) the specific location of each known illegal stormwater sewer connection; iii) current status of each known illegal stormwater sewer connection (i.e., those newly identified, those still connected and those disconnected in the previous calendar quarter); iv) alternate discharge location or method of discharge; v) identity of person or entity responsible for the known illegal stormwater sewer connection; and vi) the date each known illegal stormwater sewer connection was identified.

C. Within ninety (90) days of the Date of Entry of this Consent Decree, Defendants shall submit to EPA for approval

a plan for implementation and enforcement of Section 24-11(9) of the Code of Metropolitan Dade County, Florida. The plan shall include at a minimum: i) a proposed annual budget; ii) a discussion of the method(s) of enforcement; and iii) a program to identify illegal stormwater sewer connections and to ensure effective implementation of the ordinance.

D. Within thirty (30) days of receipt of EPA's comments on the proposed plan of implementation and enforcement, Defendants shall modify the plan of implementation and enforcement accordingly, and submit the plan of implementation to EPA for final approval. Upon receipt of EPA's final approval of the plan of implementation and enforcement, Defendants shall undertake the implementation of the plan, which shall be incorporated into, and become enforceable under this Consent Decree for a period of five (5) years.

E. Beginning thirty (30) days after the first calendar quarter following the Date of Entry of this Consent Decree, and thirty (30) days after the end of each calendar quarter thereafter, Defendants shall certify and report to EPA the progress Defendants have made toward complying with the provisions of Paragraph 12.

13. Pump Station Inspection and Repair.

A. Defendants shall inspect and repair, if necessary, each pump station in Defendants' Collection System. For purposes of this Paragraph only, Defendants' Collection System shall have the meaning ascribed to it by Paragraph 10(H) of this Consent

Decree, and shall include all portions of Defendants' Collection System as of the Date of Lodging of this Consent Decree.

B. Within thirty (30) days of the Date of Lodging of this Consent Decree, Defendants shall provide to EPA a list that identifies each pump station within Defendants' Collection System. The pump station list shall: i) identify the nominal average pump operating time (as defined in Paragraph 16(C) of the First Partial Consent Decree and Paragraph 23 of this Consent Decree) for each pump station; ii) identify any and all known overflows of wastewater from, or caused by, a pump station(s) since January 1, 1993, and the cause of such overflows; and iii) identify whether the pump station has been equipped with an elapsed time meter. For purposes of this Paragraph, the term "overflow" shall mean any discharge of wastewater from any portion of Defendants' Collection System, except from National Pollutant Discharge Elimination System ("NPDES") permitted outfalls.

C. No later than July 27, 1995, Defendants shall have completed the inspection of at least one hundred and seventy (170) pump stations. Defendants shall complete the inspection of pump stations in Defendants' Collection System at the rate of at least one hundred and seventy (170) pump stations per year as calculated from July 27, 1995. Defendants shall continue the program of pump station inspections until Defendants have completed the inspection of all pump stations in Defendants' Collection System. At a minimum, Defendants shall inspect each

pump station for the purpose of identifying any equipment malfunction and physical deficiencies that could lead to equipment malfunctions. Defendants shall complete the correction of all equipment malfunction(s) and physical deficiencies that could lead to equipment malfunctions identified during the pump station inspections no later than twelve (12) months after the calendar quarter during which the pump station inspection(s) was completed.

D. Defendants shall complete the repair, or other improvements to, each pump station which has caused or contributed to an overflow condition, as identified in Paragraph 13(B), within one hundred and eighty (180) days of the Date of Entry of this Consent Decree. If Defendants determine that a pump station which has caused or contributed to an overflow condition, as identified in Paragraph 13(B), must be upgraded, Defendants shall submit to EPA for approval, within ninety (90) days of the Date of Entry of this Consent Decree, a schedule for upgrade which shall specify that Defendants will undertake the upgrade of such pump station within thirty (30) days of the date of EPA approval. Defendants shall complete the repair, or other improvements to, each pump station which causes or contributes to an overflow condition occurring after the Date of Entry of the Consent Decree, within sixty (60) days of the date of the overflow condition. If after the Date of Entry of this Consent Decree, Defendants determine that a pump station which has caused or contributed to an overflow condition must be upgraded,

Defendants shall submit to EPA for approval, within thirty (30) days of the date the overflow condition was identified, a schedule for upgrade which shall specify that Defendants will undertake the upgrade of such pump station within thirty (30) days of the date of EPA approval of the schedule for the upgrade. The obligations of Paragraph 13(D) shall continue for period of five (5) years from the Date of Entry of this Consent Decree. For purposes of Paragraph 13(D) only, the slip lining of a gravity sewer line(s), or the replacement of gravity sewer lines (including any manholes or appurtenances), or force mains shall be considered an upgrade.

E. Beginning thirty (30) days after the end of the first calendar quarter following the Date of Lodging of this Consent Decree, and thirty (30) days after the end of every calendar quarter thereafter, Defendants shall certify and report to EPA the progress of Defendants' pump station inspection and repair program. The progress report shall: i) list each pump station; ii) identify the date of completion of the inspection of each pump station; iii) identify whether the pump station is in need of repair; iv) identify the date of completion of the repair of each pump station; v) describe the repair or other improvement taken or to be taken with respect to each pump station for which Defendants have identified either an equipment malfunction or physical deficiencies that could lead to equipment malfunction; and vi) identify whether a pump station has caused or contributed to an overflow condition during the calendar quarter.

F. Paragraph 13 of this Consent Decree shall terminate consistent with the procedure set forth in Paragraph 67(B), upon Defendants' certification, and EPA's acceptance of that certification, that the work required by Paragraph 13(B) & (C) has been completed according to the specifications and requirements of Paragraph 13.

14. Pump Station Remote Monitoring.

A. Defendants shall continue the Supervisory Control and Data Acquisition (i.e., SCADA) program for the installation and operation of remote monitoring equipment in all pump stations within Defendants' Collection System as set forth below.

B. Defendants shall complete installation, and have on-line and, in fact, operational, remote monitoring equipment at all major wastewater booster pump stations, regional pump stations, and pump stations with more than two (2) pumps, identified in Appendix E to this Consent Decree, no later than two (2) years from the Date of Entry of this Consent Decree. Defendants shall complete installation, and have on-line and, in fact, operational, remote monitoring equipment at fifty (50) percent of the total of all pump stations with two pumps with greater than 25 horsepower per pump as identified in Appendix E to this Consent Decree no later than three (3) years from the Date of Entry of this Consent Decree. Defendants shall complete installation, and have on-line and, in fact, operational remote monitoring equipment for the remaining fifty (50) percent of the total of all pump stations with two pumps with greater than 25

horsepower per pump as identified in Appendix E to this Consent Decree no later than four (4) years from the Date of Entry of this Consent Decree. Defendants shall complete installation, and have on-line and, in fact, operational, remote monitoring equipment of all other pump stations as identified in Appendix E to this Consent Decree within six (6) years of the Date of Entry of this Consent Decree. Defendants shall install remote monitoring equipment in each pump station built or obtained by Defendants that is not identified in Appendix E according to the specifications set forth in Paragraph 14(C). Where a pump station has caused an overflow of wastewater from Defendants' Collection System since January 1, 1993, Defendants shall complete the installation, and have on-line and, in fact, operational, remote monitoring no later than one (1) year from the date of such overflow or within one (1) year of the Date of Lodging of this Consent Decree, whichever is later.

C. Defendants' pump station monitoring system shall continuously monitor, report and transmit information as follows:

- i) Defendants shall install remote monitoring equipment at each pump station that does not have dry pits and that have no more than two (2) pumps of less than or equal to 25 horsepower per pump with at least the following inputs: a) high water level alarm in wet well; b) pump station power failure; c) D.C. low battery; and d) remote signal failure alarm; ii) Defendants shall install remote monitoring equipment at each pump station, other than the pump stations described in (i) above, with the following

inputs: a) operating hours after midnight for each sewage pump and total pump station operating hours after midnight and number of pump starts; b) wet well level with high and low level alarm set point; c) kilowatts calculated from pump station amperage; d) flow (instantaneous and average) determined from a flow meter or flow calculated based on pump(s) amperage and discharge pressure; e) discharge pressure with high and low level alarm set points; and f) minimum digital inputs, including high water level alarm in wet well, drywell flooding, intrusion alarm, A.C. pump station power failure, D.C. low battery and remote signal failure alarm. System monitoring data of wet well levels, force main pressures, and energy requirements (kilowatts) shall be stored for ten (10) days in an historical data base. The pump station operating hours for each pump shall be recorded monthly with elapsed time meters and entered into an historical data base. Defendants shall use radio transceivers for the primary transmission of data. Where radio paths are unreliable in areas with heavy foliage or building structures other remote terminal units or telephone dialers or alarm systems shall be used. Defendants shall retain for each month the 24-hour maximum and the monthly average flow data until termination of this Consent Decree.

D. Beginning thirty (30) days after the end of the first calendar quarter following the Date of Entry of this Consent Decree, and thirty (30) days after the end of each calendar quarter thereafter, Defendants shall certify and report

to EPA the progress Defendants have made toward completion of Paragraphs 14(B) and (C). Paragraph 14 shall continue until such time as remote monitoring equipment for each pump station in Appendix E is on-line and, in fact, operational for a period of at least ninety (90) days. If, after installation of remote monitoring equipment in a pump station, it becomes necessary to remove the SCADA equipment because of undue interference, Defendants shall notify EPA of the interference problem and ascertain whether or not alternative communication routing is practical. Defendants may petition EPA to disconnect remote monitoring equipment at a pump station if, and only if, Defendants are not able to identify a practicable alternative communication routing option.

15. Short-Term Collection System Operation Plan.

A. Within one hundred and twenty days (120) days of the Date of Lodging of this Consent Decree, Defendants shall submit to EPA for review, comment, and approval a "Short-Term Collection System Operating Plan" ("Short-Term Plan"). The Short-Term Plan shall: i) identify alternate flow routing options to assist in the prevention of the unpermitted discharge of untreated wastewater containing raw sewage from Defendants' Collection System; ii) evaluate available information for existing force main line pressures to identify operational or maintenance procedures that will increase the net transmission capacity in Defendants' Collection System; iii) identify measures that will prevent or retard conditions and factors that may lead

to future and further degradation of hydraulic capacity or structural integrity in Defendants' Collection System such as solids build-up, corrosion, or any other cause; iv) identify means and modes of communication between manned pump stations, field crews and management; v) provide, in writing, collection system operations, policies, practices and procedures; and vi) describe in detail pump station inspection schedules for dry weather and wet weather conditions. The Short-Term Plan shall be limited to non-capital improvements to Defendants' Collection System.

B. Within thirty (30) days of receipt of EPA's final comments on the Short-Term Plan, Defendants shall modify the Short-Term Plan consistent with EPA's final comments and submit the Short-Term Plan to EPA for final approval. Upon its final approval by EPA, the Short-Term Plan shall be incorporated into, and become enforceable under, this Consent Decree. Defendants shall implement the plan within seven (7) days of receipt of EPA approval.

C. Defendants shall review and update, as necessary, the Short-Term Plan on an annual basis until such time as EPA approves the Long-Term Collection System Operation Plan as required by Paragraph 18. Each annual update of the Short-Term Plan shall be subject to EPA approval as set forth in Paragraph 15(A) and (B), above, and upon EPA approval shall be incorporated into, and become enforceable under, this Consent Decree.

D. Beginning thirty (30) days after the end of the

first calendar quarter following implementation of the Short-Term Plan, and thirty (30) days after the end of each calendar quarter thereafter until such time as EPA approves the Long-Term Collection System Operation Plan as required by Paragraph 18, Defendants shall submit to EPA a report setting forth the operations measures implemented by Defendants during the previous calendar quarter.

16. Collection and Transmission System Model.

A. Defendants shall design, purchase, or develop and install, implement, and maintain a computerized collection and transmission system model or models (the "Model") for Defendants' Collection System to: i) assist in the development and implementation of operation and maintenance procedures to optimize transmission capacity within Defendants' Collection System; and ii) evaluate the impact of infiltration/inflow rehabilitation projects, proposed system modifications, upgrades, and expansions to the transmission capacity and performance of Collection System.

B. The Model required by this Paragraph shall, at a minimum, be capable of, and be used for, predicting: i) volume of wastewater flow in the force mains and the major gravity lines throughout Defendants' Collection System; ii) hydraulic pressure (psig) of wastewater at any point in force mains throughout Defendants' Collection System; iii) flow capacity of each of the pump stations in Defendants' Collection System; iv) flow capacity of pump stations with the back-up pump out-of-service;

v) peak flows for each pump station; and vi) likelihood and location of overflow(s) within a pump station's service area under conditions where the pump station's back-up pump is out-of-service and considering available wet well capacity, off-line storage capacity, and normal in-line storage capacity. The Model shall also be capable of simulating all manifolded force mains and all private pump stations which manifold into Defendants' force main system. For the purposes of this Paragraph only, the phrase "major gravity lines" shall mean all gravity sewer lines that are twenty (20) inches in diameter or larger and all gravity interceptor lines conveying wastewater from one pump station service area to another pump station service area.

C. Within one hundred and fifty (150) days from the Date of Entry of this Consent Decree, Defendants shall submit to EPA for approval a report that sets forth a project approach and detailed schedule of development, installation and implementation of the Model for Defendants' Collection System (the "Project Approach Report"). For purposes of obtaining EPA approval of the Project Approach Report, the term Defendants' Collection System shall have the meaning ascribed to it by Paragraph 10(H) of this Consent Decree, and shall include all portions of Defendants' Collection System for which construction work was completed as of the date of submittal of the Project Approach Report to EPA. The Project Approach Report shall include, at a minimum, the following information: i) Model's name and type; ii) Model's specific attributes, characteristics and limitations; iii) base

algorithms for each major computational function;
iv) identification of all input parameters, constants, assumed values and expected outputs; v) identification of staff, including a description of experience and training, who will be involved in the development or selection, and installation and continued implementation of the Model; vi) computer hardware required to run the Model; vii) computer hardware to be used; viii) identification of specific users of the Model and previous or current applications of the Model; and ix) a digitized map that identifies and characterizes the portions of Defendants' Collection System that shall be included in the Model.

D. The Project Approach Report required by Paragraph 16(C) shall also identify how the Model will be adapted to predict wastewater flows through Defendants' Collection System, including: i) identification of specific input data to be used; ii) configuration of the Model; iii) procedures and protocols for performance of sensitivity analyses (i.e., how the Model responds to changes in input parameters and variables); iv) procedures for calibration of the Model to account for values representative of Defendants' Collection System using actual system data (e.g., flow data); v) procedures for verification of the Model's performance using actual system data (e.g., flow data); vi) the bases for inputs used to characterize inflow in each service area; and vii) how representative values of the Model's constant values such as pipe inside diameters or friction factors (e.g., Manning's "n" or Hazen-Williams' "C") shall be determined by

tests conducted in Defendants' Collection System. EPA will use its best efforts to review the Project Approach Report required by this Paragraph within sixty (60) days of its receipt by EPA.

E. Within sixty (60) days of receipt of EPA's final comments on the Project Approach Report required by Paragraph 16(C) and (D) above, Defendants shall modify the report, including its schedule of development, consistent with EPA's final comments, and within the capabilities of the Model selected by Defendants and approved by EPA, and submit the Project Approach Report to EPA for final approval. EPA will use its best efforts to review the Project Approach Report as described in this Paragraph within sixty (60) days of its receipt by EPA. Defendants shall immediately begin to implement the Project Approach Report and schedule of development upon receipt of EPA's final approval. Upon final approval by EPA of the Project Approach Report and schedule of development, the schedule of development for the Model shall be incorporated into, and become enforceable under, this Consent Decree.

F. Defendants shall complete implementation of the Model no later than eighteen (18) months after the date of EPA's approval of the Project Approach Report, and shall certify to EPA for its acceptance that: i) the Model is capable of performing those functions required by Paragraph 16(B) for Defendants' Collection System as prescribed by Paragraph 16(B); and ii) the Model has been calibrated (including the performance of sensitivity analyses) and verified in accordance with the Project

Approach Report using actual system data (e.g., flow data) from permanent and temporary monitoring points in Defendants' Collection System. Defendants shall describe in a report to EPA, that shall be submitted together with the above-certification, the results of the Model calibration and verification.

G. Beginning thirty (30) days after the end of the first calendar quarter following receipt of EPA's final approval of the Model Project Approach Report and thirty (30) days after the end of each calendar quarter thereafter until EPA's acceptance of Defendants' certification of the Model, Defendants shall submit to EPA a report setting forth the progress made by Defendants during the previous calendar quarter.

17. Long-Term Adequate Transmission Capacity/Pump Station Upgrade.

A. Defendants shall undertake and complete a program of pump station upgrade and collection system improvements to achieve long-term adequate transmission capacity in Defendants' Collection System.

B. No later than sixty (60) days after the date of EPA's acceptance of Defendants' certification of the Model required by Paragraph 16 of this Consent Decree, Defendants shall submit to EPA for review, comment and approval a plan to conduct a rainfall dependent Peak Flow Management Study ("Study") and a proposed schedule for completion of the Study. The Study shall characterize infiltration and inflow of water into, and the peak flows predicted for and experienced by Defendants' Collection System. The Study shall predict peak flows to each pump station

in Defendants' Collection System, and shall assess each pump station's ability to manage peak flows. Peak flows shall be predicted and verified based on field testing of each pump station.

In the alternative, Defendants may characterize peak flows for a group of pump stations based on field testing. Pump stations may be considered "representative" of the group of pump stations if the pump stations exhibit similar responses to the variables which impact peak flow of the group established in the EPA-approved Peak Flow Management Study Plan. Examples of variables that shall be considered include, but are not limited to: the average age of the gravity sewer system; soil-type and porosity; maximum, minimum and average yearly groundwater elevations; proximity to surface water bodies; tidal influence; ratio of pervious to non-pervious surface area; service area size; land use; historic infiltration/inflow data; seasonal population patterns; and collection system construction materials.

Where Defendants elect to determine peak flows for a group of pump stations based on field testing, Defendants shall conduct field testing of at least ten (10) percent of the pump stations, but never less than three pump stations, that comprise the group, selecting such pump stations at random, to demonstrate that the pump stations which comprise the group do in fact have similar peak flow response characteristics. Such field testing shall be sufficient to establish that the selection of pump

stations for inclusion in a group supports the use of comprehensive field testing data from the representative pump station(s) to develop peaking factors to be applied to other pump stations in the group. Peak flow for a group shall be determined by averaging the hydrographs for the field tested pump stations. Peak flow for the field tested pump stations shall be determined by the actual field data collected at those pump stations. Peak flow for each pump station in a group of less than three pump stations shall be determined by the actual field testing of each pump station. The Study developed in Paragraph 17(B) shall identify: i) the basis for any grouping of pump stations where the representative pump station approach is used; ii) the method to select random pump stations in the group for testing to ensure a similar peak flow response for all pump stations included in the group; iii) the nature and scope of field testing; and iv) field testing methodology to be followed on these randomly selected pump stations.

As part of the Study, Defendants shall develop infiltration and inflow hydrographs for each of the service areas included in the Model. The hydrographs shall be developed using: i) historical flow data measured at pump stations and treatment plants; ii) existing night-time isolation flow measurements; and iii) temporary flow monitoring data in selected service areas. The inflow hydrographs shall be developed for various storm recurrence frequencies. The infiltration and inflow hydrographs shall be combined with baseline wastewater flow and routed

through the gravity sewers, pump stations and force mains by the Model.

C. The Study shall be designed to allow Defendants to demonstrate whether the pump stations in Defendants' Collection System are capable of operating in accordance with the following pump station criteria: i) each pump station shall be capable of managing peak flows with a back-up pump out-of-service without causing or contributing to overflows from Defendants' Collection System; ii) all equipment malfunctions identified during the inspections required in Paragraph 13 are corrected; and iii) all applicable State and local regulatory requirements and permit conditions are satisfied. For purposes of this Paragraph, the term "back-up pump" shall mean the highest capacity pump installed in the pump station, except where two or more pumps are of equally high capacity, in which case any of the highest capacity pumps may be designated as the back-up pump.

During the evaluation of a pump station's ability to manage its peak flow, and during the selection of remedial measures for a pump station or a portion of Defendants' Collection System, Defendants shall consider the interrelationship between: i) each pump station and the pump station immediately upstream from that pump station, ii) all pump stations through which flow from that pump station passes to the wastewater treatment plant receiving such flow, and iii) all pump stations discharging directly to the force main network which receives flow from that pump station. The Study may take into

consideration the utilization of "normal in-line storage capacity" for peak flows resulting from storm events in evaluating the ability of each pump station to manage peak flows.

D. Within sixty (60) days of receipt of EPA's final comments on the plan for the Study and the schedule for completion of the Study, Defendants shall modify the plan for the Study and schedule consistent with EPA's comments, and resubmit the Study plan and schedule to EPA for final approval. Upon final approval by EPA, the Study plan and schedule shall be incorporated into, and become enforceable under, this Consent Decree. Defendants shall begin to implement the Study within seven (7) days of receipt of EPA's final approval. EPA will use its best efforts to plan for the Study submitted under this Paragraph within ninety (90) days of its receipt by EPA.

E. Ninety (90) days after completion of the Study plan, Defendants shall submit to EPA for acceptance and approval a report of the results of the Study ("Study Report") which shall: i) identify the peak design flow rates for each pump station in Defendants' Collection System; ii) identify each pump station that fails to meet the criteria set forth in Paragraph 17(C); iii) propose and provide preliminary engineering reports for specific remedial action(s) to upgrade or improve each pump station in Defendants' Collection System so that each of Defendants' pump stations is capable of meeting pump station criteria specified in Paragraph 17(C); and iv) propose a schedule for each remedial action(s) identified. Within sixty (60) days

of receipt of EPA's final comments on the Study Report including the schedules required by Paragraph 17(E)(iv), Defendants shall modify the Study Report and schedules for pump station remedial actions consistent with EPA's final comments and resubmit the Study Report and schedules to EPA for final acceptance and approval. Upon final acceptance and approval by EPA, the Study Report and schedules shall be incorporated into, and become enforceable under, this Consent Decree. If EPA fails to approve the Study Report and schedules within ninety (90) days of the date of the receipt of the Study Report and schedule, the Study Report and schedule shall be deemed approved.

F. The requirements affecting the issuance of, or authorization to issue, building permits, as set forth in Paragraph 16(C) of the First Partial Consent Decree, shall no longer be applicable to a pump station where the results of the EPA-accepted and -approved Peak Flow Management Study demonstrate that the pump station satisfies the criteria set forth in Paragraph 17(C) of this Consent Decree. The provisions of Paragraph 17 of this Consent Decree shall be applicable to such pump station.

G. Where the results of the EPA-accepted and -approved Study demonstrate that a pump station does not meet the pump station criteria set forth in Paragraph 17(C) Defendants shall undertake specific "remedial action(s)" (i.e., upgrade that pump station or undertake other improvements to Defendants' Collection System) so that each pump station is capable of meeting the pump

station criteria specified in Paragraph 17(C).

H. The requirements affecting the issuance of, or the authorization to issue, building permits, as set forth in Paragraph 16(C) of the First Partial Consent Decree, shall remain applicable to a pump station, except as specifically modified below, where the results of the EPA-accepted and -approved Peak Flow Management Study demonstrate that a pump station does not meet the criteria set forth in Paragraph 17(C) of this Consent Decree. Where specific remedial action(s) is required for a pump station pursuant to Paragraph 17 of this Consent Decree, Defendants shall continue to comply with the requirements and permit-issuance restrictions contained in Paragraph 16(C) of the First Partial Consent Decree, as amended, except that Defendants may: i) substitute a shorter schedule for completion of specific remedial action(s) undertaken pursuant to Paragraph 17 for the schedule contained in a permit issued pursuant to Paragraph 16(C) of the First Partial Consent Decree; or ii) modify the permit issued pursuant to Paragraph 16(C) of the First Partial Consent Decree to substitute the specific remedial action(s), and the schedule for completion of such remedial action(s), undertaken pursuant to Paragraph 17 of this Consent Decree; or iii) issue, or authorize the issuance of, building permits pursuant to Paragraph 17 of this Consent Decree where specific remedial action(s) has been identified, provided that the schedule for completion of the remedial action has been approved by EPA and expressly incorporated into such building permit(s).

I. With respect to Paragraph 17(H)(iii), above, Defendants shall issue building permits pursuant to the requirements of Paragraph 16(C)(iii), (ix) and (x) of the First Partial Consent Decree governing the demonstration of adequate transmission capacity and building permit issuance, except that the nominal average pump operating time established by Paragraph 16(C) of the First Partial Consent Decree may apply but only during the period of time proceeding nine (9) months prior to the scheduled completion of the specific remedial action(s) approved under Paragraph 17 of this Consent Decree. Within nine (9) months of the scheduled completion of the specific remedial action(s) approved pursuant to Paragraph 17 of this Consent Decree, the criteria established by Paragraph 17(C) of this Consent Decree shall apply for purposes of determining adequate transmission capacity. Notwithstanding the foregoing, the period of time to which Paragraph 16 of the First Partial Consent Decree applies may be shortened or eliminated by Defendants upon election and written notification of such election to EPA in which case the requirements of Paragraph 17 of this Consent Decree shall apply.

J. Where a specific remedial action required by Paragraph 17 of this Consent Decree will be completed in less than six (6) months, the requirements of Paragraph 17(H) of this Consent Decree shall not apply. However, Defendants shall complete such remedial action in accordance with the EPA-approved schedule subject to the stipulated penalties as specified in

Paragraph 28 of this Consent Decree. Where such remedial action does not result in achievement of the pump station design criteria specified in Paragraph 17(C) of this Consent Decree, Defendants shall not issue any building permits that contribute flow to the area served by such pump station until such time as Defendants demonstrate to EPA that the pump station is capable of achieving the design criteria.

K. Except as specified in Paragraph 17(H) and (I) of this Consent Decree, nothing in Paragraph 17 of this Consent Decree shall alter the requirements and restrictions set forth in Paragraph 16 of the First Partial Consent Decree, and those requirements and restrictions are expressly incorporated herein.

L. Notwithstanding the terms and conditions of Paragraph 17, Defendants may authorize the reconnection of sewer service connections to Defendants' Collection System or to the collection system of Volume Sewer Customers where the disconnection was the result of Hurricane Andrew.

M. Notwithstanding the terms and conditions of Paragraph 17 of this Consent Decree, Defendants may authorize new service connections in those cases where a pollution or sanitary nuisance condition exists as the result of the discharge of untreated wastewater from an on-site septic tank. Defendants shall authorize such connections only after Defendants have: i) verified and documented the existence of the pollution or sanitary nuisance condition; and ii) submitted to EPA documentation, which verifies the nature of the nuisance

condition, and the address and the precise point of discharge to the collection system.

18. Long-Term Collection System Operation Plan.

A. Within one hundred and fifty (150) days of EPA's final approval of the Peak Flow Management Study as described in Paragraph 17(B), Defendants shall submit to EPA for approval a Long-Term Collection System Operation Plan ("Long-Term Plan"). The Long-Term Plan shall use the Model required by Paragraph 16 and other analytical tools to: i) evaluate the transmission capacity of Defendants' Collection System; ii) identify specific alternate flow routing options to assist in the prevention of unpermitted discharge of untreated wastewater containing raw sewage from Defendants' Collection System; iii) specifically evaluate existing force main operating pressures and maximum anticipated transient pressures due to pump failure, valve failure, pump start-up or shutdown, or other causes; iv) specifically evaluate the factor of safety against failure of the force mains due to the conditions identified in Paragraph 18(A)(iii), above; v) specifically identify operational or maintenance procedures (with the assistance of the Model or other analytical tools) that will improve the net transmission capacity in Defendants' Collection System; and vi) identify measures (including the identity of any capital improvements) that will assist in the prevention of the failure of force mains, further degradation of hydraulic capacity or structural integrity in Defendants' Collection System, transient surge pressures, solids

build-up, or any other cause of overflows. The Study may take into consideration the utilization of normal in-line storage capacity for peak flows resulting from storm events in evaluating the ability of each pump station to manage peak flows. The Long-Term Plan may be limited to non-capital improvements to Defendants' Collection System.

B. Within sixty (60) days of receipt of EPA's final comments on the Long-Term Plan, Defendants shall modify the Long-Term Plan consistent with EPA comments, and submit the Long-Term Plan to EPA for final approval. Upon receipt of final approval by EPA, the Long-Term Plan shall be incorporated into, and become enforceable under, this Consent Decree. Defendants shall implement the Long-Term Plan within seven (7) days of receipt of EPA final approval.

C. Defendants shall review and update, as necessary, the Long-Term Plan on an annual basis until termination of this Consent Decree. Each update of the Long-Term Plan shall be subject to EPA approval as set forth in Paragraph 18(A) and (B), above, and upon EPA approval shall be incorporated into, and become enforceable under, this Consent Decree.

D. Beginning thirty (30) days after the end of the first calendar quarter following implementation of the Long-Term Plan, and thirty (30) days after the end of each calendar quarter thereafter, Defendants shall submit to EPA a report setting forth the operations measures implemented by Defendants during the previous calendar quarter, and shall identify any previously

reported operations measures which were discontinued during the previous calendar quarter.

19. Maintenance.

A. Defendants shall implement a maintenance program for Defendants' Collection System to provide for the proper operation of equipment while minimizing failures due to the lack of adequate preventative care. For purposes of this Paragraph only, the term Defendants' Collection System shall have the meaning ascribed to it by Paragraph 10(H) of this Consent Decree, and shall include all portions of Defendants' Collection System as of the Date of Lodging of this Consent Decree.

B. Within one hundred and twenty (120) days of the Date of Entry of this Consent Decree, Defendants shall provide to EPA for comment, review and approval a report that describes in detail Defendants' existing maintenance program and practices for the gravity sewer lines, force mains and pump stations of Defendants' Collection System. Defendants' maintenance report shall include a detailed description of: i) maintenance inspection procedures; ii) routine preventative maintenance schedules and procedures; iii) corrective maintenance response and reporting procedures; and iv) current staffing and resource commitments. Defendants shall submit the above-described comprehensive maintenance program and tracking system report and either copies of the forms and the records to be used (if manual) or the software (if computerized) and the associated software users' instruction manuals. Defendants' comprehensive

maintenance program and tracking system shall be capable of tracking maintenance activities, and equipment histories, and scheduling preventative maintenance activities.

C. Scheduled preventative maintenance activities shall include, but not be limited to, the following: i) appropriate, necessary and periodic service and calibration of all instrumentation, including flow meters, liquid level sensors, alarm systems, elapsed time meters, and remote monitoring equipment; ii) routine inspection and service for each pump station, including engines, motors, generators, pumps, wet wells, and related equipment; and iii) appropriate, necessary and periodic inspection and testing and, if necessary, servicing of all pumps including impellers, seals and bearings, wear clearances, couplings, drives and motors.

D. Within sixty (60) days of receipt of EPA's final comments on the comprehensive maintenance program and tracking system proposed pursuant to Paragraph 19(B) above, Defendants shall modify the comprehensive maintenance program and tracking system, within the capabilities of the RJN software currently being implemented by Defendants "RJN Group's" computer aided support system ("CASS Works"), consistent with EPA's final comments and submit the comprehensive maintenance program and tracking system to EPA for final approval. Upon final approval by EPA, the comprehensive maintenance program and tracking system shall be incorporated into, and become enforceable under, this Consent Decree. Within ninety (90) days of receipt of EPA's

final approval, Defendants shall complete the input of equipment-specific data into its comprehensive maintenance program and tracking system and implement the scheduled maintenance activities in the system.

E. Beginning thirty (30) days after the first calendar quarter following implementation of the comprehensive maintenance program and tracking system, and thirty (30) days after the end of each calendar quarter thereafter for a period of five (5) years, Defendants shall submit to EPA a report setting forth the maintenance program measures implemented by Defendants during the previous calendar quarter and shall identify any previously reported maintenance program measures which have been abandoned or discontinued in the previous calendar quarter.

20. Spare Parts.

A. Within one hundred and twenty (120) days of the Date of Entry of this Consent Decree, Defendants shall develop and submit to EPA for approval a description of an inventory management system and an inventory of critical spare parts. The inventory management system shall identify: i) procedures for establishing an inventory of all spare parts and quantities (both needed and on-hand) necessary to provide routinely encountered maintenance functions in Defendants' Collection System; ii) procedures for identification of all critical spare parts and needed inventories; and iii) an inventory of critical spare parts that identifies current inventory, needed inventory and all inventory deficiencies. The system shall facilitate the

identification of, and accounting for, all costs associated with the inventory management system in a manner consistent with generally accepted accounting principles. For purposes of this Paragraph only, the term Defendants' Collection System shall have the meaning ascribed to it by Paragraph 10(H) of this Consent Decree, and shall include all portions of Defendants' Collection System as of the Date of Lodging of this Consent Decree.

B. Within sixty (60) days of receipt of EPA's final comments on the inventory management system and inventory of critical spare parts submitted by Defendants in accordance with Paragraph 20(A) above, Defendants shall modify the inventory management system (within the capabilities of the existing software) and inventory of critical spare parts consistent with EPA's final comments and submit the inventory management system and inventory of critical spare parts to EPA for final approval. Where a response to EPA comments requires modification to software, such software modification shall be detailed in a schedule provided by Defendants. Upon receipt of final approval by EPA, the inventory management system and inventory of critical spare parts shall be incorporated into, and become enforceable under, this Consent Decree. Within ninety (90) days of receipt of EPA's final approval, Defendants shall certify to EPA that Defendants have implemented the approved inventory management system and it is in use and, in fact, operational.

C. Defendants shall contract to acquire all critical spare parts or specify the time frame to procure and source of

procurement (within the framework of established procurement practices within Dade County) to cure inventory deficiencies no later than one hundred and fifty (150) days after receipt of EPA's final approval. The parties agree that certain items may not be maintained in Defendants' inventory if they can be secured from vendors on an as needed basis. No later than one hundred and twenty (120) days after contracting to acquire the spare parts for the inventory of critical spare parts, Defendants shall obtain and thereafter maintain a sufficient supply of routine spare parts to satisfy scheduled maintenance needs and a sufficient supply of critical spare parts to enable the repair or replacement of equipment in a minimum amount of time so as to ensure elimination of unpermitted discharges and proper operation of Defendants' Collection System.

D. Defendants shall report to EPA on a quarterly basis the status of critical spare parts procurement and remaining inventory deficiencies for a period of one (1) year (i.e., four calendar quarters) after receipt of EPA's final approval of the inventory management system and inventory of critical spare parts. The report shall be submitted to EPA thirty (30) days after the end of each calendar quarter and shall describe the current inventory of critical spare parts on hand or on order, as well as those critical spare parts that are available in a vendors' inventory. The report shall also identify existing current inventory deficiencies. See Paragraph 20(A). The report shall also identify steps taken by Defendants to obtain

substitute spare parts or to replace the equipment for which critical spare parts are unavailable where Defendants are unable to obtain critical spare parts from vendors or where such parts are obsolete or discontinued.

21. Treatment Plant Optimization Program.

A. Defendants shall develop and implement a program to optimize wastewater treatment efficiency and effectiveness at its North District Wastewater Treatment Plant ("North Plant"), Central Plant, and South District Wastewater Treatment Plant ("South Plant"). The program shall be completed in accordance with EPA's Composite Correction Program ("CCP") as described in Improving POTW Performance Using the Composite Correction Approach, EPA CERL, October 1984.

B. Defendants shall complete a CCP for the North Plant, Central Plant, and South Plant, respectively. Each CCP shall be conducted in two phases. Phase I shall consist of a Comprehensive Performance Evaluation ("CPE") for each plant, and shall include a complete evaluation of: i) plant's hydraulic and biological design capabilities and limitations; ii) administrative and managerial procedures; iii) operational procedures; and iv) maintenance practices. The CPE shall be completed as set forth in Chapter 3 of EPA's Improving POTW Performance Using the Composite Correction Approach, EPA CERL, October 1984, except that the parties recognize that the point scoring system set forth in Chapter 3 of EPA's Improving POTW Performance Using the Composite Correction Approach, EPA CERL,

October 1984, is inapplicable to Defendants' treatment plants involved and will not be used; the process evaluation will be based on industry standards promulgated by technical professional groups including, but not limited to, Water Environment Federation ("WEF") Manual of Practice No. 8 and American Society of Engineers ("ASCE") Manual and Report on Engineering Practice No. 76. Phase II shall consist of the implementation of the recommendations set forth in the Performance Improvement ("PI") at Defendants' North Plant, Central Plant, and South Plant, respectively. Phase II shall focus on solutions to performance improvement.

C. Defendants shall complete Phase I of the CCP (i.e., the CPE) for each of their three plants no later than one hundred and eighty (180) days from the Date of Entry of this Consent Decree. Within two hundred and ten (210) days of the Date of Entry of this Consent Decree, Defendants shall submit to EPA for review and approval a report which sets forth the results of the CPE for Defendants' North Plant, Central Plant, and South Plant, respectively. The report shall specifically identify the remedial measures Defendants shall take to improve the performance of its plants. In addition, the report shall set forth a schedule for the implementation and completion of each remedial measure. Within sixty (60) days of receipt of EPA's final comments on the report required by this Paragraph, Defendants shall modify the report and schedule consistent with EPA's comments and submit the report and schedule to EPA for

final approval. Upon final approval by EPA, the report and schedule shall be incorporated into, and become enforceable under, this Consent Decree. Defendants shall complete each of the remedial measures identified in the report in accordance with the EPA approved schedule of implementation.

D. This Paragraph shall terminate consistent with the procedure set forth in Paragraph 67(B), upon Defendants' certification, and EPA's acceptance of that certification, that the work required by Paragraph 21 has been completed according to the specifications and requirements of Paragraph 21.

22. Volume Sewer Customers.

A. Defendants shall undertake, to the extent provided for by the Dade County Code, ordinance or rules, all steps necessary to eliminate or otherwise control overflows and the unpermitted discharge of wastewater from the collection and transmission systems of the present and future Volume Sewer Customers of the Miami-Dade Water and Sewer Department ("Volume Sewer Customers"). Defendants shall require that present and future Volume Sewer Customers comply with any and all Metropolitan Dade County ordinances and rules.

B. Within ninety (90) days of the Date of Lodging of this Consent Decree, the County Manager shall propose an ordinance to the Commission which shall require each existing and future Volume Sewer Customer to implement collection and transmission remedial programs, as follows: i) infiltration/inflow evaluation and rehabilitation program to

identify and reduce infiltration/inflow to Volume Sewer Customer's collection and transmission system; ii) identification and elimination of each illegal stormwater connection to the Volume Sewer Customer's collection and transmission system; iii) inspection and rehabilitation of each pump station within the Volume Sewer Customer's collection and transmission system; iv) installation and operation of remote monitoring equipment at each pump station within the Volume Sewer Customer's collection and transmission system; v) design or purchase, and installation, implementation and maintenance of a collection and transmission system computer model for the Volume Sewer Customer's collection and transmission system; vi) implementation of maintenance and spare parts programs; and vii) program for the reporting of unpermitted discharges and overflows from the Volume Sewer Customer's collection and transmission system. The ordinance shall expressly specify that the remedial programs for the collection and transmission system of the Volume Sewer Customer shall include, at a minimum, the specific standards for the remedial measures specified in Paragraphs 11, 12, 13, 14, 16, 17, 19, 20 and 24 of this Consent Decree. Nothing in this Consent Decree shall impose any obligation on any Volume Sewer Customer who operates a federal or state permitted wastewater treatment facility which discharges wastewater to Defendants' Collection System only on an emergency overflow basis.

C. Thirty (30) days after enactment of the ordinance, and subject to the enactment of the ordinance, Defendants shall

submit to EPA a plan to implement the Volume Sewer Ordinance. The plan shall include at a minimum: i) a proposed budget; ii) a discussion of the method(s) of enforcement as set forth in the ordinance or the Metropolitan Dade County Code; and iii) a plan for staffing to ensure effective implementation of the ordinance.

D. Within thirty (30) days of receipt of EPA's comments on the proposed plan of implementation, Defendants shall modify the plan of implementation accordingly, and submit the modified plan of implementation to EPA for final approval. Upon receipt of EPA's final approval of the plan of implementation, Defendants shall undertake the implementation of the plan, which shall be incorporated into, and become enforceable under this Consent Decree.

23. Clarification of Paragraph 16(C) of the First Partial Consent Decree

A. For purposes of Paragraph 16(C) of the First Partial Consent Decree and Paragraph 17 of this Consent Decree, the phrase "newly authorized sewer service connection" shall mean any connection to Defendants' Collection System or the collection system of entities and municipalities serviced on a "bulk" basis by Defendants ("Volume Sewer Customers") that will contribute additional wastewater flows from any source.

B. The phrase "entities and municipalities serviced on a bulk basis" shall be substituted for the word "Defendants" at page 29, line 2 of Paragraph 16(C)(iv) of the First Partial Consent Decree.

C. The phrase "entities and municipalities serviced on

a bulk basis" and the phrase "Volume Sewer Customers", as that phrase is defined in Paragraph 10(J) of this Consent Decree, shall have the same meaning for purposes of the interpretation of the First Partial Consent Decree and this Consent Decree.

D. Paragraph 16(C) of the First Partial Consent Decree shall be amended to add the following language to the end of Paragraph 16(C)(iii) for the purpose of clarifying the application of Paragraph 16(C) to "multiple speed pump stations" and "variable speed pump stations":

"Nominal average pump operating time" for "multiple speed pump stations" shall mean that multiple speed pump stations shall exhibit a nominal average power consumption that is less than or equal to forty-six (46) percent of the rated multiple speed pump station motor horsepower. "Nominal average power consumption" shall be defined as the daily average power consumption for the previous twelve (12) months divided by one less than the total number of pumps installed at that station. For purposes of this Paragraph, the "rated multiple speed pump station motor horsepower" shall be defined as the sum of the rated horsepower for one less than the total number of pumps installed in that station.

Variable speed pump stations shall exhibit a nominal average power consumption that is less than or equal to a percentage (as specified in i-iii below) of the "rated variable speed

pump station motor horsepower". "Nominal average power consumption" shall be defined as the daily average total power consumption for the previous twelve (12) months divided by one less than the total number of pumps installed in that station. For purposes of this Paragraph, the "rated variable speed pump station motor horsepower" shall be defined as the sum of the rated horsepowers for one less than the total number of pumps installed in that station. The "nominal average power consumption" shall be a percentage of the "rated variable speed pump station motor horsepower", as follows: i) the percentage for variable frequency driven pump stations shall be forty-nine (49) percent; ii) the percentage for pump stations using magnetic drive type variable speed units shall be sixty-five (65) percent; and iii) the percentage for pump stations using "Flow Matcher" type of variable speed drives shall be sixty-one (61) percent.

24. Reporting of Unpermitted Discharge Events.

A. Defendants shall report to EPA by oral notification or notification by facsimile any unauthorized discharge of wastewater from Defendants' Collection System to any surface water body within twenty-four (24) hours of the time Defendant first becomes aware of the unauthorized discharge. The report shall be made to the Unit Chief, Florida/Georgia Unit, Enforcement Section, Water Permits Enforcement Branch, Water Management Division, United States Environmental Protection

Agency, or within twenty-four (24) hours of the time either Defendant first becomes aware of the unauthorized discharge. A written submission shall also be provided to EPA within five (5) days of the time either Defendant first became aware of the unauthorized discharge. The written submission shall contain the following: i) the cause of the discharge; ii) duration and volume (estimate if unknown); iii) description of the source (e.g., manhole cover, pump station); iv) type of collection system that overflowed (i.e., combined or separate); v) location by street address, or any other appropriate method; vi) date of event; vii) the ultimate destination of the flow (e.g., surface waterbody, land use location, via municipal separate storm sewer system to a surface water body (show location on a USGS map or copy thereof); and viii) correction actions or plans to eliminate future discharges.

B. Compliance with the reporting and notification requirements imposed by this Consent Decree shall not relieve Defendants from the obligation to submit reports or retain documents and information as required by the Clean Water Act, the regulations promulgated thereunder, the NPDES permits, or any other permit, or Federal, state or local law.

C. In addition to the reports and documentation required to be provided by Defendants under the terms of this Consent Decree, Defendants shall also provide, upon demand, any analytical data or any other documents requested by the United States to review work done, or to be done, by Defendants or to

determine Defendants' compliance with the terms of this Consent Decree.

VIII.

REPORTING

25. A. Beginning thirty (30) days after the first calendar quarter following the Date of Lodging of this Consent Decree, Defendants shall submit in writing to the individuals identified in Paragraph 62, a report containing the following information: the current status and progress made since the last report of the Remedial Actions specified in Paragraphs 11 through 21 of this Consent Decree and all relevant information concerning compliance or non-compliance with the requirements of this Consent Decree including any reason for noncompliance. Such report shall also include a summary of the work projected to be performed pursuant to this Consent Decree during the following calendar quarter. Notification to EPA pursuant to this Paragraph of any anticipated delay, by itself, shall not excuse the delay.

B. With the exception of the reporting requirements specified in Paragraphs 16(A)(v) and 16(C), the reporting requirements of Paragraphs 11 through 16 of the First Partial Consent Decree are amended to permit Defendants to report to EPA on the progress of the remedial actions specified therein once a calendar quarter. Such reports shall be due to EPA thirty (30) days after the first calendar quarter following the Date of Lodging of this Consent Decree, and thirty (30) days after each calendar quarter thereafter.

IX.

EFFLUENT LIMITATIONS

26. Nothing in this Consent Decree shall relieve Defendants of their obligation to comply at all times with all effluent limitations in their NPDES Permits. Nothing in this Consent Decree shall relieve Defendants of their obligation to comply with all effluent limitations in the NPDES Permit, in the event that Defendants' NPDES Permit(s) is modified, extended or reissued.

X.

CIVIL PENALTY/SUPPLEMENTAL ENVIRONMENTAL PROJECTS

27. A. Defendants shall pay a civil penalty to the United States in the total amount of \$2,000,000 for violations as alleged by the United States in the complaint filed in this matter. Payment shall be made in four payments over three (3) years or sooner, with interest accruing on all unpaid portions of the penalty amount from the Date of Lodging of this Consent Decree. Payment shall be made pursuant to the following payment schedule or earlier: (i) within thirty (30) days of the Date of Entry of the Consent Decree Defendants shall pay \$500,000, and (ii) on the first, second and third anniversary of the Date of Entry of the Consent Decree, Defendants shall pay \$500,000 plus all interest due and owing (compounded annually from the date of Lodging of the Consent Decree on all unpaid principal). If Defendants fail to make any scheduled payment within thirty (30) days after the applicable due date, the entire unpaid penalty

amount, including interest, shall become immediately due and owing to the United States.

B. Defendants shall pay interest, as required by Paragraph 27(A), at the rate provided in 28 U.S.C. § 1961(a), that is, a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of this Consent Decree. Interest shall be computed daily and compounded annually.

C. Defendants shall make the payment specified in Paragraph 27(A) by tendering a certified check or cashier's check payable to the "Treasurer, United States of America" to the office of the United States Attorney for the Southern District of Florida, 99 N.E. 4th Street, Suite 300, Miami, Florida 33132. Simultaneously, Defendants shall send copies of the registered or certified check and the transmittal letter to the Chief, Environmental Enforcement Section, United States Department of Justice, Post Office Box 7611, Ben Franklin Station, Washington, D.C. 20044, and to the Director, Water Management Division, the United States Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30365.

D. Supplemental Environmental Projects: Defendants shall undertake supplemental environmental projects in the amount of \$5,000,000, as follows:

i) For Water Conservation, Defendants commit to spend at least \$1,000,000 on the project(s) specified in Appendix F to

this Consent Decree;

ii) For Water Reuse, Defendants commit to spend at least \$4,000,000 on the project(s) specified in Appendix G to this Consent Decree.

iii) Defendants shall complete the supplemental environmental projects described in Appendix F and Appendix G, according to the schedules for completion specified therein, and subject to stipulated penalties as specified in Paragraph 28.

iv) Defendants expressly represent that the Water Conservation and Water Reuse supplemental environmental projects referenced in Paragraph 27(D) are not required or mandated by:
1) state law, regulation or order by State court; 2) the Dade County Code, local law or ordinance; or 3) an agreement with the State of Florida.

v) Defendants shall include in each quarterly progress report submitted to EPA pursuant to Paragraph 25(A) of this Consent Decree: 1) a description of the actions taken to perform and complete the projects specified in Paragraph 27(D)(i) and (ii) during the previous calendar quarter, and of the actions planned for the next six (6) months; 2) an itemized summary of all expenditures that were incurred during the previous quarter in performing the projects specified in Paragraph 27(D)(i) and (ii); and 3) information regarding percentage of project completion, including a description of events that may affect the schedule of completion.

vi) Upon completion of the projects specified in

Paragraph 27(D)(i) and (ii), Defendants shall submit a written notification of completion to the individuals identified in Paragraph 62. The aforementioned written notification shall include a detailed accounting of costs incurred to complete the projects specified in Paragraph 27(D)(i) and (ii), and shall include all appropriate supporting documentation.

vii) Defendants may propose an alternative Water Reuse supplemental environmental project to EPA, for EPA approval, under the following conditions: 1) the proposed alternative Water Reuse supplemental environmental project represents a change in the scope, not the nature, of the Water Reuse project set forth in Appendix G to this Consent Decree; 2) the proposed alternative Water Reuse supplemental environmental project requires Defendants to expend at a minimum four (4) million dollars; and 3) the proposed alternative Water Reuse supplemental environmental project satisfies EPA's "Policy on the Use of Supplemental Enforcement Projects in EPA Settlements," February 2, 1991, and/or other applicable policy or guidance documents identified by EPA. As part of Defendants' proposal that Defendants perform an alternative Water Reuse supplemental environmental project, Defendants may propose an alternative schedule for completion of that project.

viii) In developing an alternative Water Reuse supplemental environmental project in accordance with Paragraph 27(D)(vii), Defendants shall submit: 1) a conceptual technical description of the proposed alternative Water Reuse supplemental

environmental project, together with any relevant documents; 2) a statement of how the proposed alternative Water Reuse supplemental environmental project represents a change in the scope, not the nature, of the Water Reuse project set forth in Appendix G to this Consent Decree; 3) a budget for the completion of the proposed alternative Water Reuse supplemental environmental project; and 4) an implementation plan and schedule for completion of the proposed alternative Water Reuse supplemental environmental project.

ix) EPA agrees to review the proposed alternative Water Reuse supplemental environmental project submitted pursuant to Paragraph 27(D)(vii) of this Consent Decree and inform Defendants in writing of its approval, conditional approval (subject to the modification by Defendants of the proposal in accordance with EPA's comments), or disapproval of the proposed alternative Water Reuse supplemental environmental project. If EPA disapproves or conditionally approves the proposed alternative Water Reuse supplemental environmental project subject to modification by Defendants, Defendants agree modify the proposed alternative Water Reuse supplemental environmental project in accordance with EPA comments and resubmit it for EPA approval. Defendants shall be subject to stipulated civil penalties for failure to comply with the provisions of Paragraph 27(D)(ix).

x) Defendants agree that EPA's decision to approve, disapprove, or to conditionally approve (subject to modification

by Defendants in accordance with EPA's comments) the proposed alternative Water Reuse supplemental environmental project to Paragraphs 39, 40 and 41 of this Consent Decree shall not be subject to judicial review. Upon final approval by EPA, the proposed alternative Water Reuse supplemental environmental project shall be incorporated into, and become enforceable under, this Consent Decree.

XI.

STIPULATED PENALTIES

28. Defendants shall pay to the United States, upon demand, stipulated civil penalties for each day they fail to meet any of the milestone dates or satisfy any of the requirements set forth in or established by Paragraphs 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24(C), and 27(D), above. The stipulated civil penalties for failure to meet each milestone or any requirement date shall be as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
1st to 30th day	\$1,000
31st to 60th day	\$5,000
After 60 days	\$8,000

29. Defendants shall pay to the United States, upon demand, stipulated civil penalties in the amount of \$15,000 for each day they fail to pay the civil penalty amount specified in Paragraph 27.

30. Defendants shall pay to the United States, upon demand, stipulated civil penalties in the amount of five thousand

dollars (\$5,000) for each day they fail to submit the reports required by Paragraph 24(A) of the Consent Decree.

31. Defendants agree to pay to the United States, upon demand, a stipulated civil penalties of five hundreds dollars (\$500) per day for each day they fail to submit any of the reports required by this Consent Decree, with the exception of the reports required by Paragraph 24(A).

32. Stipulated civil penalties shall automatically begin to accrue on the first day Defendants fail to either meet any of the schedules of performance required by this Consent Decree or satisfy any obligation or requirement of this Consent Decree. Payment of stipulated civil penalties as set forth above shall be in addition to any other rights or remedies which may be available to the United States or its agencies by reason of Defendants' failure to comply with requirements of this Consent Decree, and all applicable Federal, state or local laws, regulations, wastewater discharge permit(s) and all other applicable permits. EPA shall use its best efforts to notify Defendants of EPA's belief that Defendants have failed to meet any of the schedules of performance required by this Consent Decree or satisfy any obligation or requirement of this Consent Decree.

33. Stipulated civil penalties shall be paid within thirty (30) days of the date of EPA's demand for payment of stipulated civil penalties for any non-compliance with any of the schedules of performance or requirements set forth in this

Consent Decree. Stipulated civil penalties shall be paid by submitting a cashier's or certified check payable to the "Treasurer, the United States of America", and tendered to the United States Attorney for the Southern District of Florida, 99 N.E. 4th Street, Miami, Florida 33132-2111. Copies of the registered or certified check and the transmittal letter shall be sent simultaneously to the Chief, Environmental Enforcement Section, United States Department of Justice, Post Office Box 7611, Ben Franklin Station, Washington, D.C. 20044 and to the Director, Water Management Division, United States Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30365.

34. In the event that a stipulated civil penalty is not paid when due, the stipulated civil penalty shall, upon demand of the United States, be payable with interest from the original due date to the date of payment, at the statutory judgment rate set forth at 28 U.S.C. § 1961(a).

X.

FORCE MAJEURE

35. "Force Majeure" for the purposes of this Consent Decree is defined as an event arising from causes beyond the control of Defendants or the control of any entity controlled by Defendants, including their consultants and contractors, which delays or prevents the performance of any obligation under this Consent Decree. Unanticipated or increased costs or changed financial circumstances are not Force Majeure events. Failure to

apply for a required permit or approval, or to provide in a timely manner all information required to obtain a permit or approval, necessary to meet the requirements of this Consent Decree are not Force Majeure events.

36. When circumstances are occurring or have occurred which may delay the completion of any requirement of this Consent Decree, whether or not due to a Force Majeure event, Defendants shall so notify EPA, in writing, within fifteen (15) days after Defendants knew, or should have known, of the delay or anticipated delay. The notice shall describe in detail the bases for Defendants' contention that they experienced a Force Majeure delay, the anticipated length of the delay, the precise cause or causes of the delay, the measures taken or to be taken to prevent or minimize the delay, and the timetable by which those measures will be implemented. Failure to so notify EPA shall constitute a waiver of any claim of Force Majeure as to the event in question.

37. If EPA finds that a delay in performance is, or was, caused by a Force Majeure event, it shall extend the time for performance, in writing, for a period to compensate for the delay resulting from such event and stipulated penalties shall not be due for such period. In proceedings on any dispute regarding a delay in performance, the dispute resolution provisions of Paragraphs 39, 40 and 41 shall apply, and Defendants shall have the burden of proving that the delay is, or was, caused by a Force Majeure event, and that the amount of additional time requested is necessary to compensate for that

event.

38. Compliance with a requirement of this Consent Decree shall not by itself constitute compliance with any other requirement. An extension of one compliance date based on a particular event shall not automatically extend another compliance date or dates. Defendants shall make an individual showing of proof regarding the cause of each delayed incremental step or other requirement for which an extension is sought. Defendants may petition for the extension of more than one compliance date in a single request.

XI.

RETENTION OF JURISDICTION/DISPUTE RESOLUTION

39. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of this Consent Decree and for the purpose of adjudicating all disputes among the parties that may arise under the provisions of this Consent Decree, to the extent that this Consent Decree provides for resolution of disputes by the Court.

40. Any dispute that arises with respect to the meaning, application, implementation, interpretation, amendment or modification of this Consent Decree, or with respect to Defendants' compliance herewith or any delay hereunder, the resolution of which is not expressly provided for in this Consent Decree, shall in the first instance be the subject of informal negotiations. If any party believes it has a dispute with any other party, it shall notify the other parties in writing,

setting forth the matter(s) in dispute. For purposes of this Paragraph only, Defendants shall address such notification to the United States at: U.S. Environmental Protection Agency, Region IV, Office of Regional Counsel, Attention: Regional Hearing Clerk, 345 Courtland Street, N.E., Atlanta, Georgia 30365. If the dispute cannot be resolved by the parties within thirty (30) days from receipt of such notice, then Defendants shall comply with the position of the United States unless Defendants file a petition with the Court for resolution of the dispute within forty-five (45) days of receipt of such notice of dispute. The petition shall set forth the nature of the dispute with a proposal for its resolution. The United States may, within thirty (30) days of receipt of this petition, file a response with an alternate proposal for resolution. In any such dispute, Defendants shall have the burden of proving that its proposal complies with the terms, conditions, and requirements of this Consent Decree.

41. Submission of any matter to the Court for resolution shall not extend any of the deadlines set forth in this Consent Decree, unless the parties agree to such extension in writing or the Court allows the extension upon motion.

XII.

RIGHT OF ENTRY

42. The United States and its authorized representatives and contractors shall have authority at all times, upon the presentation of credentials, to enter the

premises of Defendants to:

A. Monitor the program of activities required by this Consent Decree;

B. Verify any data or information submitted to the United States;

C. Obtain samples from any portion of Defendants' Collection System; and

D. Inspect and evaluate any portions of Defendants' Collection System.

E. Inspect and review any records required to be kept under the terms and conditions of this Consent Decree or any NPDES Permit and the Clean Water Act. This provision of this Consent Decree is in addition to, and in no way limits or otherwise affects, the United States' statutory authorities to conduct inspections, to require monitoring and to obtain information from Defendants as authorized by law.

F. The United States agrees to provide Defendants an opportunity to obtain split samples of wastewater samples taken by the United States from Defendants' Collection System. The United States further agrees to provide Defendants with the quality assured/quality controlled laboratory analytical results of samples obtained from Defendants' Collection System, and any non-privileged (including non-attorney work product) reports prepared concerning such results. The United States will use best efforts to coordinate field inspections of Defendants' Collection System with Defendants by notifying Defendants, if

practicable, of such inspections upon arrival at the field inspection location.

XIII.

NOT A PERMIT/COMPLIANCE WITH OTHER STATUTES/REGULATIONS

43. This Consent Decree is not and shall not be construed as a permit, nor a modification of any existing permit, issued pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, nor shall it in any way relieve Defendants of their obligations to obtain a permit for their wastewater treatment and collection system or facilities and to comply with the requirements of any NPDES permit or with any other applicable federal or state law or regulation. Any new permit, or modification of existing permits, must be complied with in accordance with applicable federal and state laws and regulations. With the exception of the NPDES permit violations alleged by the United States against Defendants in the complaint, violations by Defendants of any of the provisions of its NPDES permit(s) shall not be a violation of this Consent Decree and thus not enforceable through this Consent Decree.

44. Nothing herein shall be construed as relieving Defendants of the duty to comply with the Clean Water Act, the regulations promulgated thereunder, and all applicable permits issued thereunder.

XIV.

FAILURE OF COMPLIANCE

45. The United States does not, by its consent to the

entry of this Consent Decree, warrant or aver in any manner that Defendants' complete compliance with this Consent Decree will result in compliance with the provisions of the Clean Water Act, 33 U.S.C. §§ 1251 et seq., or with Defendants' NPDES permits. Notwithstanding EPA's review or approval by the United States of any plans reports, policies or procedures formulated pursuant to this Consent Decree, Defendants shall remain solely responsible for any non-compliance with the terms of this Consent Decree, all applicable permits, and the Clean Water Act and regulations promulgated thereunder.

XV.

NON-WAIVER PROVISIONS

46. The Consent Decree in no way affects or relieves Defendants of any responsibility to comply with any federal, state, or local law or regulation.

47. Nothing contained in this Consent Decree shall be construed to prevent or limit the United States' rights to obtain penalties or further additional injunctive relief under the Clean Water Act or other federal statutes or regulations, including, but not limited to, criminal punishment under Section 309(c) of the Act, 33 U.S.C. § 1319(c), except as otherwise expressly specified in the Consent Decree.

48. The parties agree that Defendants are responsible for achieving and maintaining complete compliance with all applicable federal and state laws, regulations, and permits, and that compliance with this Consent Decree shall be no defense to

any actions commenced pursuant to said laws, regulations, or permits, except as otherwise expressly specified in the Consent Decree.

49. This Consent Decree does not limit or affect the rights of Defendants or the United States as against any third parties which are not parties to this Consent Decree. The parties recognize that this Consent Decree resolves only matters between the United States and Defendants and that its execution does not preclude Defendants from asserting any legal or factual position in any action brought against Defendants by any person or entity not a party to this Consent Decree.

50. The parties reserve any and all legal and equitable remedies available to enforce the provisions of this Consent Decree.

51. This Consent Decree shall not limit any authority of EPA under any applicable statute, including the authority to seek information from Defendants or to seek access to the property of Defendants, nor shall anything in this Consent Decree be construed to limit the authority of the United States to undertake any action against any person, including Defendants, in response to conditions that may present an imminent and substantial endangerment to the environment or to the public health or welfare.

52. Application for construction grants, State Revolving Loan Funds, or any other grants or loans, or delays caused by inadequate facility planning or plans and

specifications, on the part of Defendants shall not be cause for extension of any required compliance date in this Consent Decree.

53. Obligations of Defendants under the provisions of this Consent Decree to perform duties scheduled to occur after the Date of Lodging, but prior to the Date of Entry, shall be legally enforceable from the Date of Lodging of this Consent Decree. Liability for stipulated penalties, if applicable, shall accrue for violation of such obligations and payment of such stipulated penalties may be demanded by the United States as provided in this Consent Decree.

54. It is the intent of the parties hereto that the clauses hereof are severable, and should any clause(s) be declared by a court of competent jurisdiction to be invalid and unenforceable, the remaining clauses shall remain in full force and effect.

55. The United States reserves the right to elect to file a civil action for statutory penalties or injunctive relief against Defendants for any violations of the Clean Water Act by Defendants which occur after the Date of Lodging of this Consent Decree, and for violations of the Clean Water Act, if any, concerning the alleged disposal of untreated or partially treated wastewater into shallow ponds located at the South District Wastewater Treatment Facility.

56. The United States reserves the right to elect to file a criminal action for statutory penalties or injunctive relief against Defendants for any violations of the Clean Water

Act by Defendants discovered after the Date of Lodging of this Consent Decree.

57. The United States and Defendants agree that settlement of the United States' claims for injunctive relief and civil penalties under the Clean Water Act shall have no res judicata, collateral estoppel, waiver or any other preclusive effects on any claims that the United States may have against Defendants for violations of the Safe Drinking Water Act, 42 U.S.C. §§ 300f et seq., or for violations of the Clean Water Act, if any, concerning the alleged disposal of untreated or partially treated wastewater into shallow ponds located at the South District Wastewater Treatment Facility.

58. Neither this Consent Decree nor the actions taken hereunder shall constitute an admission by the Defendant of liability for any wrongdoing regarding any of the matters referenced in this Consent Decree.

XVI.

COSTS OF SUIT

59. Each party shall bear its own costs and attorney's fees with respect to matters related to this Consent Decree. Should Defendants subsequently be determined by the Court to have violated the terms and conditions of this Consent Decree, then Defendants shall be liable to the United States for any reasonable costs and reasonable attorney's fees incurred by the United States in such actions against Defendants for non-compliance with this Consent Decree.

XVII.

CERTIFICATION OF SUBMISSIONS

60. Defendants shall maintain copies of any underlying research and data in their possession, custody or control for any and all documents, reports, or permits submitted to EPA pursuant to this Consent Decree for a period of five (5) years, except that Defendants shall not be required to maintain copies of drafts of documents, reports or permits; Defendants shall require any independent contractor implementing this Consent Decree to also retain such materials for a period of five (5) years. Defendants shall submit such supporting documents to EPA upon request. In all notices, documents or reports submitted to the United States pursuant to this Consent Decree, Defendants shall, by a senior management official of the County, sign and certify such notices, documents and reports as follows:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

61. EPA agrees to use its best efforts to expeditiously review and comment on all documents, plans and other deliverables that Defendants are required to submit to EPA pursuant to the terms and conditions of this Consent Decree. The State of Florida agrees to use its best efforts to coordinate

with Defendants to expedite evaluation of permit applications submitted by Defendants consistent with Chapter 120 of the Florida Statutes.

XVIII.

FORM OF NOTICE

62. Unless otherwise specified below, all reports, notices, or any other written communications required to be submitted under this Consent Decree shall be sent to the respective parties at the following addresses:

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources
Division
U.S. Department of Justice
Post Office Box 7611, Ben Franklin Station
Washington, D.C. 20044
Reference DOJ Case No. 90-5-1-1-4022

United States Attorney
Southern District of Florida
99 N.E. 4th Street, Suite 300
Miami, Florida 33132-2111

As to EPA:

Chief
Water Permits and Enforcement Branch
Water Management Division
U.S. Environmental Protection Agency,
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
ATTN: FL/GA/Data Management Unit

As to Defendants:

County Manager
Metropolitan Dade County
111 N.W. 1st. Street, Suite 2910
Miami, Florida 33128

Director

Miami-Dade Water and Sewer Department
4200 Salzedo Street
P.O. Box 330316
Miami, Florida 33233-0316

Assistant County Attorney
Office of the County Attorney
Miami-Dade Water and Sewer Department
4200 Salzedo Street
P.O. Box 330316
Miami, Florida 33233-0316

Office of the County Attorney
Suite 2810
Stephen P. Clark Center
111 N.W. 1st Street
Miami, Florida 33128

As to State of Florida:

Director of District Management
Southeast District
Florida Department of Environmental Protection
1900 So. Congress Ave.
P.O. Box 15425
Palm Beach, Florida 33416

Notifications to or communications with EPA, the United States Attorney or Department of Justice ("DOJ") shall be deemed submitted on the date they are postmarked and sent by certified mail, return receipt requested. Notifications to or communications with Defendants shall be deemed received on the date they are received by the Director of the Miami-Dade Water and Sewer Department.

XIX.

MODIFICATION

63. This Consent Decree contains the entire agreement of the parties and shall not be modified by any prior oral or written agreement, representation or understanding. Prior drafts of this Consent Decree shall not be used in any action involving

the interpretation or enforcement of this Consent Decree. This Consent Decree may not be amended or modified except by written order of this Court. Any modification of this Consent Decree by the parties shall be in writing and approved by the Court before it will be deemed effective.

XX.

PUBLIC COMMENT

64. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration of any comments.

XXI.

CONTINUING JURISDICTION OF THE COURT

65. The Court shall retain jurisdiction to enforce the terms and conditions of this Consent Decree and to resolve disputes arising hereunder as may be necessary or appropriate for the construction, modification or execution of this Consent Decree.

XXII.

TERMINATION

66. This Consent Decree shall terminate upon motion of the United States to the Court after each of the following has occurred:

A. Defendants have achieved compliance with all

provisions contained in this Consent Decree;

B. Defendants have paid all penalties and other monetary obligations (including supplemental environmental projects) due hereunder and no penalties or other monetary obligations (including supplemental environmental projects) due hereunder are outstanding or owed to the United States;

C. Defendants have certified compliance pursuant to Paragraph 66(A) and (B), above, to the Court and all parties; and

D. The United States, within forty-five (45) days of receiving such certification from Defendants has not contested, in writing, that such compliance has been achieved. If the United States disputes Defendants' full compliance, this Consent Decree shall remain in effect pending resolution of the dispute by the parties or the Court.

67. A. Defendants may petition the Court for termination of this Consent Decree, provided Defendants have satisfied each of the conditions set forth in Paragraph 66 above, and have certified to the United States and the Court that they have satisfied each and every term and condition of this Consent Decree as set forth in Paragraph 66 at least forty-five (45) days prior to petitioning the Court for termination.

B. Defendants may petition the United States for termination of the obligations of any paragraph of this Consent Decree, provided that Defendants have satisfied each and every term and condition of that paragraph, and certify to the United States that they have satisfied each and every term and condition

of that paragraph.

68. Upon termination of this Consent Decree by the Court the Third Claim for Relief, Fourth Claim for Relief, Fifth Claim for Relief, and Sixth Claim for Relief shall be dismissed without prejudice to any party.

XXIII.

SIGNATORIES

69. The Assistant Attorney General on behalf of the United States and the signatories for Defendants and the State of Florida to this Consent Decree certify that they are fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such party to this document.

Dated and entered this _____ day of _____ 1994.

United States District Judge

WE HEREBY CONSENT to the entry of the Second and Final Partial Consent Decree in the United States v. Metropolitan Dade County, et al., Case No. 93-1109-CIV-MORENO subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR PLAINTIFF THE UNITED STATES OF AMERICA

DATE: _____

LOIS J. SCHIFFER
Assistant Attorney General
Environment and Natural Resources
Division
United States Department of Justice

DATE: _____

ADAM M. KUSHNER
T. ANTHONY QUINN
Florida Bar No. 861952
ROBERT A. KAPLAN
ROBERT HOMIAK
KATHRYN SCHMIDT
Environmental Enforcement Section
Environment and Natural Resources
Division
United States Department of Justice
Post Office Box 7611
Ben Franklin Station
Washington, D.C. 20044
(202) 514-4046

KENDALL COFFEY
United States Attorney
Southern District of Florida

DATE: _____

PETER OUTERBRIDGE
Florida Bar No. 289914
Assistant United States Attorney
Southern District of Florida
99 N.E. 4th Street, Suite 300
Miami, Florida 33132
(305) 536-5475

DATE: _____

STEVEN A. HERMAN
Assistant Administrator for Enforcement
United States Environmental
Protection Agency
Washington, D.C. 20460

OF COUNSEL:

MARY E. GREENE
Assistant Regional Counsel
Office of Regional Counsel
United States Environmental
Protection Agency - Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

ALAN J. MORRISSEY
Office of Enforcement
United States Environmental
Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

WE HEREBY CONSENT to the entry of the Second and Final Partial Consent Decree in the United States v. Metropolitan Dade County, et al., Case No. 93-1109-CIV-MORENO, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR DEFENDANT METROPOLITAN DADE COUNTY, ACTING FOR ITSELF AND ON BEHALF OF THE DEFENDANT, MIAMI-DADE WATER AND SEWER AUTHORITY DEPARTMENT

METROPOLITAN DADE COUNTY
BOARD OF COMMISSIONERS

DATE: _____

County Manager
Metropolitan Dade County

Attest:
Clerk of the Board

DATE: _____

Deputy Clerk
(Seal)

ROBERT A. GINSBURG
County Attorney
Metropolitan Dade County

DATE: _____

C. JAN STRAYHORN
Florida Bar No. 285455
Assistant County Attorney
Metropolitan Dade County
4200 Salzedo Street
P.O. Box 330316
Miami, FL 33233-0316

WE HEREBY CONSENT to the entry of the Second and Final
Partial Consent Decree in the United States v. Metropolitan Dade
County, et al., Case No. 93-1109-CIV-MORENO, subject to the
public notice and comment requirements of 28 C.F.R. § 50.7.
FOR DEFENDANT, STATE OF FLORIDA

ROBERT A. BUTTERWORTH
Attorney General
State of Florida
State Capitol
Tallahassee, Florida 32399

DATE: _____

JON GLOGAU
Assistant Attorney General
State of Florida
State Capitol, PL-01
Tallahassee, FL 32399-1050